

converting between N-bit binary B and binary-reflected Gray code G is remarkably simple.

Binary --> Gray

$$G[N-1] = B[N-1]$$

$$G[i] = b[i+1] \text{ xor } b[i]$$

Gray --> Binary

$$B[N-1] = G[N-1]$$

$$B[i] = b[i+1] \text{ xor } G[i]$$

$$N-1 \geq i \geq 0$$

so, you can first implement a binary counter, and then convert the binary code into Gray code.

hope it is helped for you.